

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 15466193

| | | | |
|-----------------------|-------------------------|-----------------------------|------------------------|
| Frame | : 586/7T | Locked rotor time | : 43s (cold) 24s (hot) |
| Output | : 450 HP (330 kW) | Temperature rise | : 105 K |
| Poles | : 4 | Duty cycle | : Cont.(S1) |
| Frequency | : 60 Hz | Ambient temperature | : -20°C to +40°C |
| Rated voltage | : 575 V | Altitude | : 1000 m.a.s.l. |
| Rated current | : 401 A | Protection degree | : IP55 |
| L. R. Amperes | : 2605 A | Cooling method | : IC411 - TEFC |
| LRC | : 6.5x(Code G) | Mounting | : F-1 |
| No load current | : 96.8 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 1787 rpm | Noise level ² | : 83.0 dB(A) |
| Slip | : 0.72 % | Starting method | : Direct On Line |
| Rated torque | : 183 kgfm | Approx. weight ³ | : 2001 kg |
| Locked rotor torque | : 180 % | | |
| Breakdown torque | : 200 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 8.99 kgm ² | | |
| Design | : B | | |

| | | | | | |
|----------------|------|------|------|------------------|------------|
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 95.8 | 96.2 | 96.2 | Max. traction | : 1503 kgf |
| Power Factor | 0.81 | 0.85 | 0.86 | Max. compression | : 3501 kgf |

| | | | |
|----------------------|---|------------------|----------------------|
| | | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type | : | 6322 C3 | 6319 C3 |
| Sealing | : | Viton Oil Seal | Viton Seal |
| Lubrication interval | : | 5138 h | 7038 h |
| Lubricant amount | : | 60 g | 45 g |
| Lubricant type | : | Mobil Polyrex EM | |

Notes

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|---------------------------|---------|------|
| | | | | |
| Performed by | | Page 1 / 3 Revision | | |
| Checked by | | | | |
| Date | 30/10/2024 | | | |

Customer :

Thermal protection

| ID | Application | Type | Quantity | Sensing Temperature |
|----|-------------|----------------------|-----------|---------------------|
| 1 | Winding | Thermostat - 2 wires | 1 x Phase | 155 °C |

| | | | | | |
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| Rev. | Changes Summary | | Performed | Checked | Date |
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| Checked by | | | | 2 / 3 | |
| Date | 30/10/2024 | | | | |

LOAD PERFORMANCE CURVE

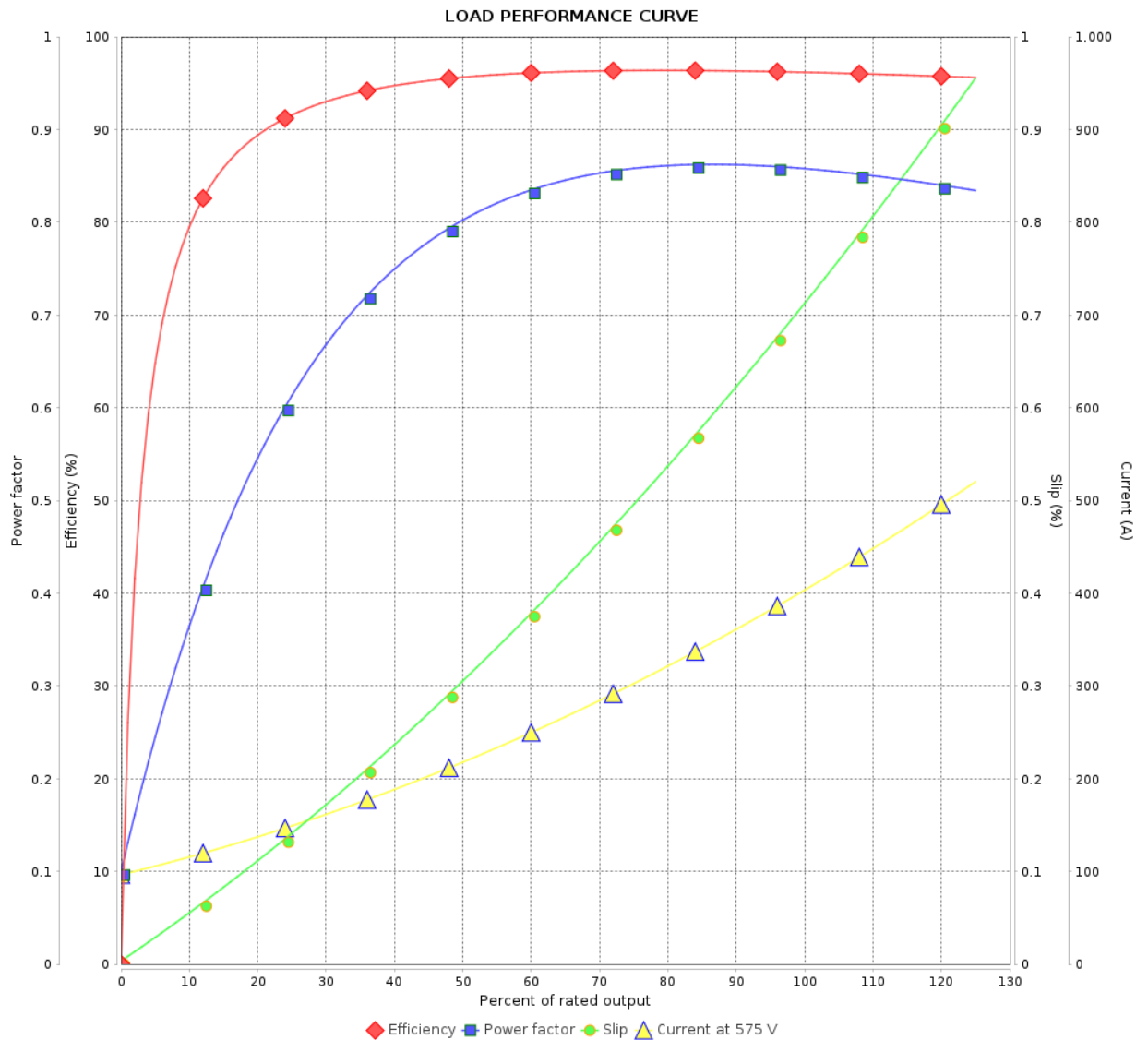
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Premium Efficiency Three-Phase

Product code : 15466193

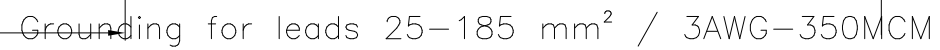
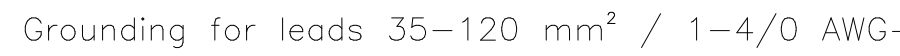




Performance : 575 V 60 Hz 4P

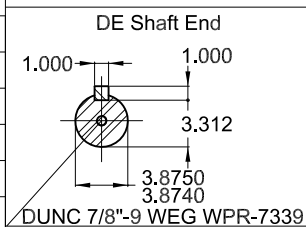
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|-----------|------------|---|---|------------|---------------------|----------|--------------------|----------|---|-----|----|
| | | | | HYBRISUSER | | | | | | 00 | |
| ECM | LOC | SUMMARY OF MODIFICATIONS | | | | EXECUTED | CHECKED | RELEASED | DATE | VER | |
| EXECUTED | HYBRISUSER |  | THREE PH. MOTOR EXPLOSION PROOF NEMA PREM. EFF. | | | | <div>PREVIEW</div> | |  | | A3 |
| CHECKED | | | FRAME 586/7T IP55 TEFC | | | | | | | | |
| RELEASED | | | | | | | WDD | 00 | | | |
| REL. DATE | | WMO | Jaragua do Sul | | Product Engineering | SHEET | 1 / 1 | | | | |



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